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CHRISTIAN SCIENCE MONITOR 23 April 1981

Q&A: Why the fuss over AWACS?

Stronger Saudi surveillance, attack capabilities seen

By Stephen Webbe

Staff correspondent of The Christian Science Monitor

Washington

Why do the Sandis want airborne warning and control systems (AWACS) aircraft?

Basically to track hostile aircraft and to serve as a tactical battle control station for their own F-15 fighters. With its 30-foot radar rotodome turning at six revolutions a minute, an AWACS aircraft can provide radar surveillance of an area from 250 to 350 miles in radius (460 miles according to one source) depending upon its altitude.

Does AWACS constitute a quantum leap in air defense? Weapons authority Russell Warren Howe has claimed that the Westinghouse doppler radar carried aboard the converted Boeing 707s, "has, as yet, no equivalent anywhere in the world" and that it could be as decisive in war as Britain's possession of radar was in 1940.

The "look-down" radar aboard AWACS E-3A aircraft apparently can detect up to 600 targets, differentiating them from terrain or "background-clutter." It can determine the size, altitude, identity, speed, and direction of at least 240 of them with the aid of its IBM computer.

In an AWACS test over Europe in 1972, all aircraft flying in an area between Paris and Warsaw reportedly were detected. The Pentagon claims that the addition of AWACS aircraft to NATO's armory constitutes the equivalent of doubling the alliance's entire force of interceptor aircraft.

Why is Israel so opposed to the sale of the five AWACS planes to the Royal Saudi Air Force?

Essentially it claims that the aircraft, which apparently can remain on station for 10 to 12 hours, will be able to observe Israeli-aircraft, airfields, and defense installations from well within Saudi territory.

More to the point perhaps, Israeli-commanders contend that AWACS aircraft become a powerful offensive weapon when used in conjunction with F-15 fighters, particularly those enhanced with long-range fuel tanks and AIM-91 air-to-air missiles.

Tests have reportedly shown that AWACS aircraft can direct an F-15 in bad weather so that the fighter can then

"lock on" to a multitude of targets with its own long-range radar. "The AWACS determines a threat that may be appearing ... picks them up several hundred miles out, takes the closest targets [and] can vector the F-15 into the general vicinity," explained US Air Force Gen-John Vogt recently.

Does Israel have other reasons to fear AWACS?

Yes. The aircraft, which carries a flight crew of four and 13 specialists manning nine multi-purpose consoles and two additional display units, can carry signals-intelligence equipment; joint tactical information systems; and electronic counter-countermeasures capabilities. These and others features give the E-3A a comprehensive battle-field surveillance capability.

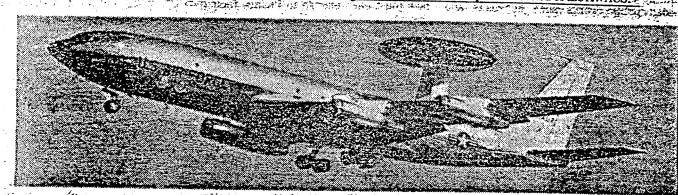
Israel believes that Saudi Arabia will receive such equipment in the aircraft it is ordering, particularly as the Pentagon has declared that modification of the aircraft to exclude such items would "degrade" their defense role and necessitate design changes.

Thus, even if the Saudis take no military action in any future fighting between Israel and its neighbors. AWACS would enable the Saudis to monitor Israeli military communications and forward this intelligence to Arab forces.

Is there a risk attached to selling AWACS to Saudi Arabia?

Perhaps. US officials recall the loss of F-14 and Phoenix missile manuals in Iran after the Shah's fall and express doubts as to the reliability of Saudi security as well as to the stability of the regime itself. "There is a danger of the aircrafts' secrets being compromised by defection, diversion of technological manuals, accident, or through Soviet intelligence activities," declares the American Israel Public Affairs Committee.

The USSR has its own AWACS plane—the TU-126, code-named "Moss". But US and NATO security almost certainly would suffer if the E-3A's secrets fell into Soviet hands. In 1977, a US General Accounting Office official quoted then-CIA director Stansfield Turner as saying if the Soviets gain access to AWACS, they could advance five to seven years in certain technologies and learn how to jam any now-contemplated version of the AWACS.



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AWACS, its giant radar dome spinning, can spot the movements of aircraft in a 250-350 mile radius